

**REMARKS (RESPONSE TO OFFICE ACTION)**

In response to the Restriction Requirement dated March 22, 2001, and in accordance with Rule 143 of the Rules of Practice, please consider the following election and remarks.

The Office Action required restriction from among:

- I. Claims 1-3, drawn to a transformed CC genome;
- II. Claims 4-10, drawn to a transformed plant comprising an exogenous transparent seed coat;
- III. Claims 11-17, drawn to a yellow seed with transparent seed coat and specified levels of erucic acid and glucosinolates;
- IV. Claim 18, drawn to use of a yellow seed;
- V. Claim 19, to the extent that it is drawn to seed oil from yellow seeds;
- VI. Claim 19, to the extent that it is drawn to seed meal from yellow seeds;
- VII. Claims 20-26, drawn to a method for increasing levels of seed oil and protein and reducing fiber in a seed;
- VIII. Claims 27, 34 and 35, drawn to a transformed *Brassica napus* plant;
- IX. Claim 28, to the extent that it is drawn to seed oil;
- X. Claim 28, to the extent that it is drawn to seed meal;
- XI. Claims 29-31, drawn to use of an AA genome as a vector;
- XII. Claim 32, drawn to a transparent seed coat encoded by a gene; and
- XIII. Claim 33, drawn to a transparent seed coat.

In response, Group I, formerly Claims 1-3, now Claims 36-109 (74 claims in total), is elected, with traverse. As a traverse, it is initially noted that original claims 4, 7, 28, 33 and 34 have been deleted from the claim set. Thus, Groups IX, X and XIII are no longer relevant.

It is further noticed that the MPEP lists two criteria for a proper restriction requirement.

First, the inventions must be independent or distinct, MPEP § 803. It is respectfully submitted that the claims herewith all comply with Group I.

Second, searching the additional inventions must constitute an undue burden on the examiner if restriction is not required. *Id.* The MPEP directs the examiner to search and examine an entire application “[i]f the search and examination of an entire application can be made without serious burden, ...even though it includes claims to distinct or independent inventions.” *Id.*

Each of the new claims is tied together by the single inventive concept that a *Brassica* CC genome is transformed with a transparent seed coat gene obtained from a *Brassica* AA genome to produce a transformed *Brassica* plant comprising the transparent seed coat gene and thus *Brassica* yellow seed. Claims 36-81, 101, 107 and 108 are product claims, whereas Claims 82-100, 102-106 and 109 are method claims.

The method claims are tied to the product claims and thus must be searched and examined together in this application, pursuant to the February 28, 1996 "Guideline on Treatment of Product and Process Claims ...", published at 1184 TMOG 86 (March 26, 1996) and MPEP §821.04, as Claims 82-100, 102-106 and 109 encompass method claims dependent upon or involving the product claims, Claims 36-81, 101, 107 and 108.

Indeed, Claims 36-44 involve a transformed *Brassica* CC genome. Claims 45-54 and 108 involve plants containing such a genome. Claims 55-81 involve seeds containing such a genome. Claims 82-100 and 109 involve methods for making the genome, plants and seeds. Claim 101 involves a *Brassica napus* plant with a transparent seed coat. And, Claims 102-106 involve methods of using the *Brassica* AA genome as a vector, akin to the means for obtaining the claimed products, and a subspecies of claimed methods. Accordingly, there is unity of invention and no undue or serious burden in searching and examining all of the claims herewith.

It is noted that the transparent seed coat gene provides the yellow color seed, as the coat is transparent thus enabling the yellow interior of the seed to be visualized (see page 2, third full paragraph of the specification). Indeed, in the corresponding UK application, GB 001714.5, claims directed to transformed plants and seeds with a transparent seed coat, and methods of increasing levels of seed oil and protein were all deemed to have unity of invention. As such, there is evidence that the present claims have unity of invention, are directed to a single inventive concept, and present no serious or undue burden to search and examine entirely within this application.

It is thus respectfully submitted that the claims herewith are subject to being searched and examined together, and that a search of all the claims now presented does not pose a serious or undue burden upon the Examiner. Accordingly, it is further respectfully submitted that the restriction requirement was improper and that with this election and new claim set, all of the new claims, including the new methods, should be searched, examined and rejoined.

**ADDITIONAL FORMAL MATTERS**

In view of the earnest belief that all of the claimed subject matter herein should be and will be searched and examined in this application, and that these claims are allowable, additional formal matters are addressed herein.

With respect to the biological materials deposited with the NCIMB as identified in the application (and as identified herewith), the specification is amended to reflect the Deposits, and the undersigned states that he is an attorney of record, that the biological materials identified as deposited in the application were deposited under the terms of the Budapest Treaty with The National Collections of Industrial and Marine Bacteria Limited (NCIMB), 23 St. Machar Drive, Aberdeen, Scotland, AB2 1RY, United Kingdom, that the biological materials deposited are the same as the biological materials disclosed in the application and:

- (a) during the pendency of this application, access to each of the Deposits will be afforded to the Commissioner upon request;
- (b) all restrictions upon availability of the each of the Deposits to the public will be irrevocably removed upon granting of the patent;
- (c) each of the Deposits will be maintained in a public depository for a period of 30 years or 5 years after the last request or for the effective life of the patent, whichever is longer;
- (d) a test of the viability of the biological material at the time of each of the Deposits was made; and
- (e) each of the Deposits will be replaced if it should ever become inviable.

**REQUEST FOR INTERVIEW**

If any issue remains as an impediment to allowance, a telephonic interview is respectfully requested prior to issuance of any paper other than a Notice of Allowance; and the Examiner is respectfully requested to contact the undersigned to arrange a mutually convenient time and manner therefor.

**CONCLUSION**

Early and favorable examination on the merits of all of the claimed subject matter and prompt issuance of a National Allowance are respectfully requested.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

On page 36, after the last line of text (after the first paragraph, which is a continuation of the last paragraph on page 35) the following paragraph is added:

NCIMB 40991 and NCIMB 40992 were deposited with The National Collections of Industrial and Marine Bacteria Limited (NCIMB), 23 St. Machar Drive, Aberdeen, Scotland, AB2 1RT, United Kingdom, under the terms of the Budapest Treaty, on December 7, 1998.

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